

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|                                                             |                                                                 |                                                                |                                                                                                                               |
|-------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Applicant's or agent's file reference<br><b>4519/W0/97+</b> | <b>FOR FURTHER ACTION</b>                                       |                                                                | see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. |
| International application No.<br><b>PCT/IL 99/ 00045</b>    | International filing date (day/month/year)<br><b>25/01/1999</b> | (Earliest) Priority Date (day/month/year)<br><b>26/01/1998</b> |                                                                                                                               |
| Applicant<br><br><b>ROSENBERG, Ariel</b>                    |                                                                 |                                                                |                                                                                                                               |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.  
☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished
2. ☐ **Certain claims were found unsearchable** (See Box I).
3. ☐ **Unity of invention is lacking** (see Box II).

**4. With regard to the title,**

- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established by this Authority to read as follows:

**HIGH EFFICIENCY RECOVERY PROCESS AND APPARATUS FOR THE PYROLYSIS TREATMENT AND HALOGENATION OF MULTI-ELEMENT WASTE**

**5. With regard to the abstract,**

- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. The figure of the drawings to be published with the abstract is Figure No.**

- ☐ as suggested by the applicant.
- ☒ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.
- ☐ None of the figures.

## Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The abstract has to be changed as follows:

Line 7, add: "An apparatus for carrying out the recovery process comprises a primary heat chamber, a halogenation chamber and a separation unit."

## INTERNATIONAL SEARCH REPORT

International Application No

IL 99/00045

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C22B7/00 C22B1/08 A62D3/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C22B A62D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                        | Relevant to claim No. |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y          | WO 97 29214 A (RESCH HERIBERT ;EDLINGER<br>ALFRED (CH); HOLDERBANK FINANC GLARUS (CH)<br>14 August 1997<br>see page 1, line 8 - page 3, line 25<br>---                                                                    | 1-22                  |
| Y          | US 4 317 800 A (SLOTEDIJK WIJTZE ET AL)<br>2 March 1982<br>see column 2, line 2 - line 42<br>see column 3, line 58 - column 4, line 55<br>see column 5, line 52 - column 6, line 26;<br>claims 1-7,12,13; figure 2<br>--- | 1-43                  |
| Y          | US 4 412 889 A (OECK ROBERT C)<br>1 November 1983<br>see column 1, line 5 - line 50<br>see column 4, line 1 - column 5, line 28;<br>figure 1<br>---<br>-/--                                                               | 1-43                  |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

20 May 1999

Date of mailing of the international search report

28/05/1999

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## INTERNATIONAL SEARCH REPORT

International Application No

/IL 99/00045

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                    | Relevant to claim No. |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Y          | DE 20 35 391 A (REDERIAKTIEBOLAGET<br>NORDSTJERNAN) 28 January 1971<br>see page 2, line 28 - page 4, line 22;<br>claims 1-8; examples 1,2,5<br>---                                                                    | 1-22                  |
| Y          | WO 95 33686 A (TNO ;LUGGENHORST HENDRIK<br>JAN (NL); PEEK EDGAR MANFRED LAWRENCE (NL)<br>14 December 1995<br>see page 3, line 36 - line 21; example III<br>see page 5, line 10 - page 6, line 5;<br>claims 1-9<br>--- | 1-43                  |
| Y          | US 5 550 312 A (GOEHLER PETER ET AL)<br>27 August 1996<br>see column 2, line 12 - line 28; figure 1<br>see column 5 - column 6<br>---                                                                                 | 23-43                 |
| Y          | WO 95 22373 A (COMMISSARIAT ENERGIE<br>ATOMIQUE ;CARRE DOMINIQUE (FR); TEMPLIER<br>JEAN) 24 August 1995<br>see claims 1-14; figure 1<br>-----                                                                         | 23-43                 |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

IL 99/00045

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
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| WO 9729214                                | A | 14-08-1997          | AT 23396 A                 | 15-10-1998          |
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|                                           |   |                     | EP 0820532 A               | 28-01-1998          |
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| US 4317800                                | A | 02-03-1982          | NL 7710901 A               | 09-04-1979          |
|                                           |   |                     | AT 374162 B                | 26-03-1984          |
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| WO 9533686                                | A | 14-12-1995          | NL 9400929 A               | 02-01-1996          |
|                                           |   |                     | AU 2538995 A               | 04-01-1996          |
|                                           |   |                     | DE 69501955 D              | 07-05-1998          |
|                                           |   |                     | DE 69501955 T              | 03-09-1998          |
|                                           |   |                     | EP 0764137 A               | 26-03-1997          |
|                                           |   |                     | JP 10501208 T              | 03-02-1998          |
| US 5550312                                | A | 27-08-1996          | DE 4139512 A               | 03-06-1993          |
|                                           |   |                     | AT 134698 T                | 15-03-1996          |
|                                           |   |                     | DE 59205475 D              | 04-04-1996          |
|                                           |   |                     | EP 0545241 A               | 09-06-1993          |
| WO 9522373                                | A | 24-08-1995          | FR 2716392 A               | 25-08-1995          |
|                                           |   |                     | DE 69503363 D              | 13-08-1998          |
|                                           |   |                     | DE 69503363 T              | 11-02-1999          |
|                                           |   |                     | EP 0746384 A               | 11-12-1996          |
|                                           |   |                     | ES 2121353 T               | 16-11-1998          |